

WHAT IS CLAIMED IS:

1. A guidance system for locating points in a living body having passages therein comprising:

5 a. a source of laser for emitting light of a predetermined frequency and means for directing said laser in a selected passage and in a selected direction said living body,

b. a detector having a plurality of individual sensors mounted in a sensor array such that laser light from said source passing through tissue in said living body impinges on one or more of said sensor array and produces an electrical signal proportional to the laser light impinging thereon,

10 c. a processor for processing intensity of laser light from said laser light source passing through said body tissue and falling on each sensor, respectively, in said sensor array, and

15 d. an indicator display connected to said processor for indicating the relative intensity of laser light impinging on said sensors, respectively, as a function of the location of said laser light source in said living body.

20 2. The guidance system defined in claim 1 including a mirror for directing laser light in said selected direction.

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3. In a medical guide for guiding a medical treatment to specific point in the body, the guidance system defined in claim 1 wherein said selected passage is a body passage leading to said specific point.

4. The bone drill guide defined in claim 2 wherein said means for introducing includes a hollow laser light opaque rod having one or more apertures therein for passing laser light from said emitter through bone to said sensors.

5. The guidance system defined in claim 3 wherein said passages includes vascular passages and said means for introducing includes a catheter.

6. In a radiation treatment system, the guidance system defined in claim 1 wherein said means for introducing is adapted to position said emitter at a target zone for radiation treatment.

7. A guidance system for locating a point in a living body having a passage therein comprising:

a. a light emitter for emitting light of a predetermined frequency and a light conduit having a light-receiving end and a light-emitting end means for introducing said light-emitting end into a selected passage in said living body,

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b. a detector having a sensor array constituted by a plurality of at least three individual sensors mounted in an array such that light from said light-emitting end passing through tissue in said living body impinges on one or more sensors in said sensor array,

c. a processor connected to said sensor array for determining the relative direction of the light-emitting end from the sensor array, and

d. an indicator connected to said processor for indication of direction of said light-emitting end relative to said sensor array to precisely locate said point.

8. The guidance system defined in Claim 7 wherein said light emitter is selected from a laser and an LED.

9. The guidance system defined in claim 7 wherein said light-emitting end is bent and light is emitted from said bent end.

10. The guidance system defined in claim 7 including a mirror.

11. A surgical guidance method for locating a point in a living body having passages therein comprising the steps of:

a. introducing a laser light source into a selected passage in said living body,

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b. providing a detector having a plurality of individual laser light intensity sensors mounted in a predetermined pattern and detecting laser light from said emitter passing through tissue in said living body which impinges on one or more sensors in said sensors in said predetermined pattern, and

c. displaying the relative light intensity of laser light detected by each sensor in said predetermined pattern in such a manner to provide an accurate indication of the relative direction of movement to achieve alignment and orientation.